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REMARKS/ARGUMENTS

Applicant appreciates the thorough examination of the present application, as evidenced by the final Official Action. Applicant also appreciates the indication that the objection to Claims 5 and 19 has been withdrawn. However, the final Official Action continues to reject all of the pending claims, namely Claims 1-21, under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,757,649 to Kato. In addition, the final Official Action continues to reject Claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,438,444 to Mizuno, in view of U.S. Patent No. 5,757,648 to Nakamura. Again, as explained below, Applicant respectfully submits that Claims 1-21 are patentably distinct from the Kato, Mizuno and Nakamura patents, taken individually or in combination. Thus, Applicant respectfully traverses the rejections of the claims under either § 102(e) or § 103(a).

A. The Claimed Invention is Patentable over the Kato Patent

As explained in response to the first Official Action, in contrast to the method, system and computer program product of independent Claims 1, 8 and 15, the Kato patent does not teach or suggest extracting process information from electronic simulation information. In this regard, the Kato patent discloses defining machining shapes from two and three-dimensional machining definition tables that include elements that collectively form product graphic data. The final Official Action alleges that "'extracting process information from electronic simulation information' may be interpreted as including the process of inputting by a user design specifications [electronic simulation information] and generating the initial graphical data [process information] by the processor means." Applicant respectfully submits, however, that neither the term "electronic simulation information" nor "process information" can reasonably be interpreted in the manner alleged in the final Official Action.

According to Section 2111 of the M.P.E.P., "pending claims must be 'given [their] broadest reasonable interpretation consistent with the specification.'" *quoting In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000) (emphasis added). As further explained, "[t]he broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach." *citing In re Cortright*, 165 F.3d 1353, 1359 (Fed. Cir. 1999). As

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disclosed in the background of the invention section of the present application, in modern CAD systems, end products are typically designed by geographically modeling a part in three-dimensions (3D). Thereafter, computer-aided manufacturing (CAM) systems are used to allow motion devices (e.g., NC devices) to operate to produce the part without a lot of manual interaction. In this regard, one aspect of most CAM systems is a process called numerical control (NC) set creation, in which an NC programmer typically creates a set of "high level" instructions designating the precise locations for machining each of the features of the component, including those of a pattern, on the component. Pat. App. p. 1, ll. 22 – p. 3, l. 26; and FIG. 1.

This set of "high level" instructions are then transmitted to a post processor, which adapts the "high level" instructions of the NC program to the specific requirements of the NC device and its machine control unit (MCU) and outputs a work piece instruction understandable to the MCU in the form of machine control data (MCD). To help ensure the motion devices operate as error free as possible, however, many modern motion systems employ electronic verification systems (e.g., NC verification system) that can simulate MCD, which can detect part program errors and bad or rapid NC device operations, and can generate electronic simulation information. In this regard, as also explained, the electronic simulation information, from which process information can be extracted in accordance with the claimed invention, includes motion device information and information respecting any objects upon which the motion device will operate. For example, the electronic simulation information can include information respecting various machine tools, information related to the components to be operated upon by the machine tool, as well as "high level" motion control information (e.g., NC set for the particular component assembly and machine tools). Pat App., p. 9, ll. 18-29.

As explicitly explained by the specification of the present application, then, electronic simulation information is typically generated after a part is modeled by a CAD system, where initial graphical data (i.e., 2D or 3D model) is generated based upon user design specifications. Thus, the claim language "extracting process information from electronic simulation information" cannot be reasonably interpreted in a manner consistent with the specification as including "the process of inputting by a user design specifications [electronic simulation

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information] and generating the initial graphical data [process information] by the processor means." In this regard, if the claim language were interpreted as alleged in the final Official Action, the present application would describe designing a part by generating electronic simulation information, and at some point thereafter again generating electronic simulation information. Applicant respectfully submits, however, that such an interpretation of the specification is not logical.

Moreover, the words of a claim must be interpreted in light of their plain meaning. M.P.E.P. § 2111.01. And in accordance with one typical plain meaning, the term "simulation" can be defined as the representation of the operation of a process by means of the operation of another process, as in, for example, a computer simulation of an industrial process. *Simluation*, Merriam-Webster Online (visited April 12, 2004) <<http://www.m-w.com/cgi-bin/dictionary?simulation>>. Nowhere, however, does the Kato patent teach or suggest that user design specifications represent the operation of a process. In fact, Applicant respectfully submits that, in no reasonable interpretation, could user design specifications be considered to represent the operation of a process, as is connoted by the phrase "electronic simulation information" in the claimed invention.

Applicant therefore respectfully submits that, consistent with the specification and the plain meaning of the claim terms, the broadest reasonable interpretation of the phrase "extracting process information from electronic simulation information," does not, in fact, include "the process of inputting by a user design specifications [electronic simulation information] and generating the initial graphical data [process information] by the processor means," as alleged by the final Official Action. Applicant therefore respectfully submits that, in contrast to the method, system and computer program product of independent Claims 1, 8 and 15, the Kato patent does not teach or suggest either extracting process information from electronic simulation information. As such, Applicant respectfully submits that independent Claims 1, 8 and 15 are patentably distinct from the Kato patent. And as dependent Claims 2-7, 9-14 and 16-21 each depend, directly or indirectly, from independent Claims 1, 8 and 15, respectively, Applicant also respectfully submits that dependent Claims 2-7, 9-14 and 16-21 are patentably distinct from the

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Kato patent. Thus, Applicant respectfully submits that the rejection of Claims 1-21 under 35 U.S.C. § 102(e) as being anticipated by the Kato patent is overcome.

B. The Claimed Invention is Patentable over the Mizuno and Nakamura Patents

The Official Action rejected Claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over the Mizuno patent, in view of the Nakamura patent. As conceded by the Official Action, the Mizuno patent does not disclose extracting process information from electronic simulation information, as recited by independent Claims 1, 8 and 15. Similarly, as explained in response to the first Official Action, the Nakamura patent likewise does not teach or suggest extracting process information from electronic simulation information. In this regard, in any embodiment of the Nakamura patent, the system operates with machining programs, whether directly implementing a machining program, converting a machining program into a compatible machining program for a substantive machining equipment, or reading machining figure data from a CAD system to generate a machining program. The Nakamura patent does not teach or suggest the use of electronic simulation information, much less extracting process information from electronic simulation information, as recited by independent Claims 1, 8 and 15.

As indicated above, the final Official Action alleges that "'extracting process information from electronic simulation information' may be interpreted as including the process of inputting by a user design specifications [electronic simulation information] and generating the initial graphical data [process information] by the processor means." Alternatively, the final Official Action alleges that electronic simulation information can be interpreted as "machining figure data," with process information interpreted as a "machining program," both of which are disclosed by the Nakamura patent. As explained above, however, Applicant respectfully submits that the broadest reasonable interpretation of the phrase "extracting process information from electronic simulation information," does not include "the process of inputting by a user design specifications [electronic simulation information] and generating the initial graphical data [process information] by the processor means." Likewise, as explained below, Applicant respectfully submits that the broadest reasonable interpretation of the phrases "electronic

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simulation information" and "process information" do not include "machining figure data" and "machining program," respectively.

As explained in the Nakamura patent, a computer-aided manufacturing (CAM) module reads machining figure data prepared by a computer-aided design (CAD) module to generate a machining program that specifies the procedures when a workpiece is processed according to the machining figure data. Col. 8, ll. 26-30. Consistent with the specification of the present application, then, the machining figure data of the Nakamura patent can be considered a graphical model of the workpiece, with the machining figure data considered the NC set for producing the workpiece. *See Nakamura Patent, FIG. 12* (illustrating both the machining figure data and corresponding machining program for a workpiece). Thus, for the same reasons given above, "electronic simulation information" and "process information" cannot properly be interpreted as "machining figure data" and a "machining program," respectively. Again, if the claim language were interpreted as alleged in the final Official Action, the present application would illogically describe designing a part by generating electronic simulation information, and at some point thereafter again generating electronic simulation information.

In addition, nowhere does the Nakamura patent teach or suggest that machining figure data represent the operation of a process, in accordance with one typical plain meaning of the term "simulation," as also indicated above. Applicant respectfully submits that in no reasonable interpretation of machining figure data, could such a term be considered to represent the operation of a process, as is connoted by the phrase "electronic simulation information" in the claimed invention. Thus, Applicant therefore respectfully submits that, consistent with the specification and the plain meaning of the claim terms, the broadest reasonable interpretation of the phrase "extracting process information from electronic simulation information," does not include either interpretation alleged by the final Official Action. Applicant therefore respectfully submits that, in contrast to the method, system and computer program product of independent Claims 1, 8 and 15, neither the Mizuno nor the Nakamura patents, taken individually or in combination, teach or suggest either extracting process information from electronic simulation information. As such, Applicant respectfully submits that independent Claims 1, 8 and 15 are patentably distinct from the Mizuno and Nakamura patents, taken individually or in combination.

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And as dependent Claims 2-7, 9-14 and 16-21 each depend, directly or indirectly, from independent Claims 1, 8 and 15, respectively, Applicant also respectfully submits that dependent Claims 2-7, 9-14 and 16-21 are patentably distinct from the Mizuno and Nakamura patents, taken individually or in combination. Thus, Applicant respectfully submits that the rejection of Claims 1-21 under 35 U.S.C. § 103(a) as being unpatentable over the Mizuno patent, in view of the Nakamura patent is overcome.

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CONCLUSION

In view of the remarks presented above, Applicant respectfully submits that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact Applicant's undersigned attorney in order to resolve any remaining issues.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

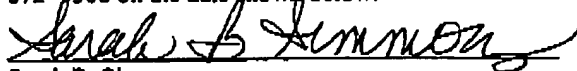


Andrew T. Spence
Registration No. 45,699

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

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